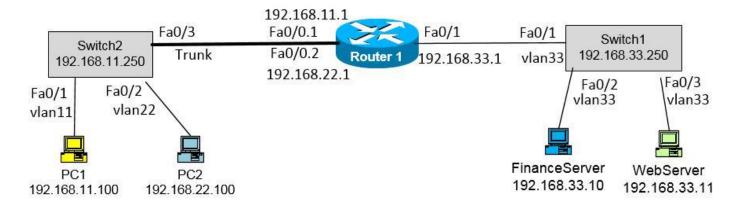
CS4471 Lab Assignment 7 Access Control List (version 1.0)

Use Cisco Packet Tracer program to create the network shown below.

- configure the hostnames, IP address, and subnet mask(255.255.255.0) of all seven devices as shown.
- interconnect the seven devices with appropriate Ethernet cables and verify that all six links are up
- configure the switch ports to be the vlans shown



- 1. (20 pts) Submit screenshot of Cisco Packet Tracer network diagram created. Make sure that the port labels are shown (Options->Preferences->Show Port Labels)
- 2. (20 pts) On Router1, configure interface Fa0/1 with values shown in diagram. Create two subinterfaces on Fa0/0 to handle trunked traffic from vlan11 and vlan22. Subinterfaces Fa0/0.1 and Fa0/0.2 need to be configured with IP addresses shown and tagged with vlan id 11 or 22.
 - a. Submit screenshot showing that from the command prompt window of PC1, you can ping the IP address of the other six devices.
 - b. Submit screenshot showing that from the command prompt window of PC1, you can traceroute to the IP address of the other six devices.
- 3. Suppose that you need to implement a security policy where (i) the WebServer should be accessible from any network, (ii) the FinanceServer should be accessible only to users in subnet 192.168.22.0/24 and inaccessible to users in subnet 192.168.11.0/24, and (iii) computers in network 192.168.11.0/24 are not allowed to directly interact with computers in network 192.168.22.0/24. Create an appropriate Cisco ACL that can filter the traffic appropriately.
 - a. (5 pt) which of the three router interfaces should be used to filter the traffic?
 - b. (5 pt) In which direction (inbound or outbound) should the ACL be applied on the interface you just specified?
 - c. (20 pts) submit printout of output of "show access-lists"
- 4. (30 pts) Verify that from the command prompt window of PC1 that you can still ping 192.168.33.11 but you no longer can ping 192.168.22.100 and 192.168.33.10. Submit printouts of output of "show running-config" from CLI of each switch and router.